Amendments to the Specification:

On page 1, after the title and before the line beginning "Tubulysins have already" please insert the following paragraph:

This is a 371 filing of International Patent Application No. PCT/EP2003/009780 filed September 3, 2003 and published on March 18, 2004 under publication number WO 2004/022586 A and claims priority benefits from German Patent Application No. 102 41 152.2 filed September 5, 2002.

On page 23, please rewrite the paragraph beginning at line 9 and ending at line 12 as follows:

By virtue of their action on the tubulin skeleton and their cytotoxicity, especially in the case of fungi, ~~tubulins~~ tubulysins are also suitable as a disinfectant which can reduce or prevent contamination with tubulin-containing cells.

On page 26, please rewrite the paragraph beginning at line 14 and ending at line 25 as follows:

An *A. disciformis* culture grown in 50 ml of tryptone medium (10 g of tryptone; 2 g of ~~$MgSO4_2$~~ $MgSO_4$; 0.1 % vitamin B12 [10 ng/ml]; 0.2 % glucose per 1 litre of medium; pH 7.2) is

cultured at 30°C to 2 * 10^8 cells/ml. On the basis of a generation time of 6 hours, this culture was inoculated the day before so that, as calculated, this cell density would be achieved. The culture is centrifuged at 20°C (20 min; 4000 rpm) and the cells are resuspended in the same volume of washing buffer (5mM HEPES/NaOH, 0.5mM $CaCl_2$; pH 7.2). After centrifuging again, they are resuspended in 25 ml of buffer and centrfuged again. Before that centrifugation step, the absolute cell count in the 25 ml is determined so that, as calculated 1 * 10^9 cells/μl are resuspended.

On page 28, please rewrite the paragraph beginning at line 10 and ending at line 20 as follows:

The mutants were incubated in 96-well microtitre plates in 200 μl of M7 medium (5 g of Probion; 1 g of $CaCl_2$; 1 g of ~~$MgSO4_4$~~ $MgSO_4$; 1 g of yeast extract; 5 g of starch; 10 g of HEPES; 0.1 % vitamin B12 [10 ng/ ml] per 1 litre of medium; pH 7.4) at 32°C, and after 10 days a copy of the entire band was produced.

For the purpose, 50 μl of culture of each mutant were transferred with 100 μl of M7 medium to new microtitre plates. After incubation for a further seven days, a copy was frozen at -80°C to provide long-term cultures. The

remaining copy of the bank was extracted and the extract was tested for generated tubulysin knockout mutants by means of a toxicity test.

On page 47, column 1, row 2of the table, please change as follows:

TubZ

Lysine cyclodeaminase
"~~pipicolinic~~ pipecolinic acid
synthase"

SEQ ID NO:25